## GP 34 224 (1)

## EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER

2003332141

**PUBLICATION DATE** 

21-11-03

APPLICATION DATE

15-05-02

APPLICATION NUMBER

2002139817

APPLICANT:

TDK CORP;

INVENTOR:

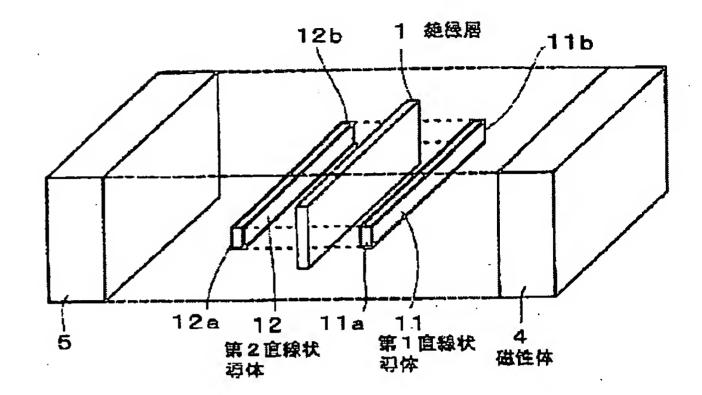
FUJISHIRO YOSHIKAZU;

INT.CL.

H01F 27/29 H01F 17/04

TITLE

CHIP COMMON MODE CHOKE COIL



ABSTRACT:

PROBLEM TO BE SOLVED: To provide a chip common mode choke coil superior in high speed transmission by lessening the capacitance between the parts of a coil conductor and heightening the resonant frequency of common mode characteristics.

SOLUTION: The chip common mode choke coil forms the same shaped first and second linear conductors 11 and 12 making a pair on the front and rear of an insulating layer, sandwiches the first and second linear conductors 11 and 12 with magnetic components 4 and 5, and has a structure forming a coil conductor making the pair by only the linear conductors 11 and 12. Both ends of each linear conductor 11 and 12 are connected to a mounting outside electrode respectively, and the mounting outside electrode is formed so that the formation face of each linear conductor 11 and 12 is vertical to a mounting surface. When a thickness of the insulating layer 1 is t1, the thickness of the first linear conductor 11 is t2 and the thickness of the second linear conductor 12 is t3, a condition of t1+t2+t3>100 µm is desired to be satisfied.

COPYRIGHT: (C)2004,JPO